Prediction Result

Method	NYC	Chicago	DC
HM	6.79734	4.68078	3.66747
ARIMA	5.60477	3.79739	3.31826
HMM	5.42030	3.79743	3.20889
XGBoost	5.32069	3.75124	3.14101
LSTM	5.13589	3.68210	3.15595
Single Correlation Graph	4.77930	3.28816	2.86756
Single Distance Graph	4.78984	3.54810	2.76741
Single Interaction Graph	4.97007	3.23574	2.67335
Attention Based Graph Fusion	4.27751	3.09178	2.55618

补充实验

（1）多层GCLSTM

City : DC

Method : Graph Fusion

lr: 5e-4

层数	RMSE Remove Zero
一层GCLSTM	2.55618
两层GCLSTM	2.53276
三层GCLSTM	2.53432

（2）Simple Average 和 Weighted Average

Method	NYC	Chicago	DC
Naive Average 直接用三个single graph的结果进行平均	4.58827	3.22160	2.66711
Weighted Naive Average 直接用三个single graph的结果进行加权平均	4.58469	3.18152	2.63383
Hidden Feature Average 将GAL替换成Average	-----	-----	-----
Weighted hidden Feature Average 将GAL替换成参数加权Average	-----	-----	-----
Attention based fusion	4.27751	3.09178	2.55618

（3）在一个Graph上去掉GCLSTM上的hidden state graph convolution

City : DC

Metric : RMSE remove zero

Method	GCLSTM 去除 hidden state 上的GC	GCLSTM
Single Correlation Graph	2.97511	2.86756
Single Distance Graph	2.97097	2.76741
Single Interaction Graph	2.90921	2.67335

~~（4）调整lr~~

City : DC

Model : Attention Based Fusion

lr	RMSE Remove Zero
5e-5	2.65364
1e-4	2.60200
2e-4	2.58210
5e-4	**2.55618**
1e-3	2.51335

（5）训练数据长度

City : DC

Model : Attention Based Fusion

lr : 5e-4

Train Day Length	RMSERemove Zero
完整数据集 40个月	2.55618
12个月	2.60002
6个月	2.65427
3个月	2.71175